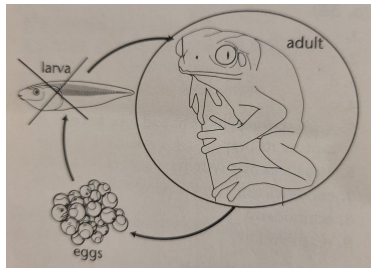


Section 12 - 2

1. They get oxygen from water
2. Both are made of cartilage
3. Jawless fishes, cartilaginous fishes (sharks & rays), bony fishes
4. External
5. A swim bladder helps a fish stabilize its body at different depths.
6. Answers may vary. Sample: limiting fishing through quotas; growing fish in fish farms
7. Cartilaginous
8. Ectotherms
9. True
10. True
11. Swim bladder
12. Buoyant force

Section 12 - 3

1-3



4. Frogs and toads; salamanders. As adults, frogs and toads have four legs. The hind legs are adapted for jumping. They breathe with lungs and most are predators. Toads have dry, warty skin. Frogs' skins are moist and smooth. Adult frogs and toads lay eggs in water that hatch into larvae called tadpoles. Tadpoles live in water, breathe with gills and are generally vegetarian. They gradually develop legs and lungs and become adult frogs. And adult salamander has four legs adapted for walking, moist skin, lungs and a tail. Salamanders are predators. Reproduction is similar to that of frogs and toads, but most have internal fertilization, whereas frogs and toads have external fertilization.

5. One reason is the loss of habitat. Another reason is that amphibians are particularly sensitive to pollution, because their skins are thin and their eggs lack hard shells. Human-caused pollution is becoming more common.

6. Amphibians have strong skeletons and muscular limbs adapted for moving on land.

7. Amphibians are ectothermic vertebrates. They have 3-chambered heart. Their life cycle includes 3 stages. Eggs laid in water hatch into swimming, gilled tadpoles that metamorphose into air-breathing adults with legs.

8. Specific environment in which an animal lives

9. Upper chamber of hearts; receives blood
10. Lower chamber of hearts; pumps blood out.

Section 12 - 4

1. C, F, H
2. G
3. D
4. A
5. B, E
6. Reptiles are ectothermic vertebrates with thick skins. They breathe with lungs and have 4-chambered hearts and two-loop circulatory system. Most lay thick-shelled eggs. The major groups of reptiles are lizards, snakes, turtles, alligators and crocodiles. Most reptiles are predators.
7. Urine is a fluid of concentrated wastes that helps an animal reduce water loss

Section 13 - 1

1. Answers may vary. Samples: endothermic, feathers, four-chambered heart, lay eggs
2. Answers may vary. Samples: wings, feathers, hollow bones, strong chest muscles, air sacs.
3. Steering and balancing in flight (contour feathers); keeping warm (down feathers)
4. The heart has four chambers - two atria and two ventricles. The circulatory system has two loops. One loop carries blood from the heart to the lungs, the other loop carries blood from the heart to the rest of the body.
5. Answers may vary. Samples: A woodpecker's bill enables it to find insects by chiseling holes into trees. The bill of a spoonbill enables it to feed on small animals in water
6. Crop
7. Down feather
8. Insulator
9. Gizzard
10. Contour feather

Section 13 - 3

1. Answers may vary. Samples: endothermic, hair, four-chambered heart, young fed on mother's milk
2. It is probably cold
3. The lungs
4. Answers may vary. Sample: Mammals have a four-chambered heart and a two loop circulatory system.
5. Answers may vary. Sample: you can infer what it eats
6. Canine
7. Incisor
8. molar/premolar
9. Diaphragm

10. Mammary gland
11. mammal

Section 14 - 1

1. To help animals survive and reproduce
2. L
3. I
4. Conditioning
5. Answers may vary. Example: a dog learns to come when called after it gets a treat for doing it several times.
6. Answers may vary. Example: a man learns to type by practicing
7. Answers may vary. Example: a girl learns to do a back flip off the diving board by practicing
8. Insight learning
9. E
10. A
11. G
12. D
13. B
14. F
15. C

Section 14 - 2

1. Any two: food, water, space, shelter, mates
2. Any two: sounds, scents, body position, movements
3. Any two: to find food, to avoid cold, to reproduce
4. Defining its boundaries by marking or advertising them in some manner; defending it
5. Answers may vary. Sample: it ensures that males and females of the same species recognize each other so that mating and reproduction can take place.
6. Answers may vary. Sample: group members protect each other and work together to find food.
7. Answers may vary. Sample: the fish are communicating visually, by displaying their fins. They might be communicating aggression toward one another, or they might be competing for food, territory or mates
8. Migration
9. Hibernation
10. Society
11. Circadian rhythms
12. aggression